

***LineUp With Math™* Alignment**
Illinois Learning Standards
Stages F, G, H - Mathematics (Grades 5, 6, 7, 8, 9)

State Goal 7: Estimate, make and use measurements of objects, quantities and relationships and determine acceptable levels of accuracy.

C. Select and use appropriate technology, instruments, and formulas to solve problems, interpret results, and communicate findings. (*Progression from selection of appropriate tools and methods to application of measurements to solve problems*)

7.C.3b Use concrete and graphic models and appropriate formulas to find perimeters, areas, surface areas and volumes of two- and three-dimensional regions.

Descriptor – Stage G

4. Solve simple problems involving rate, time, and distance.

***LineUp With Math™* Activities**

--Apply mathematics to solving distance, rate, and time problems for aircraft conflict scenarios.

Descriptor – Stage H

1. Solve simple problems involving rates and other derived measurements such as velocity and density.

***LineUp With Math™* Activities**

--Apply mathematics to solving distance, rate, and time problems for aircraft conflict scenarios.

--Identify and resolve distance, rate, time conflicts in air traffic control problems by varying plane speeds or changing plane routes.

State Goal 10: Collect, organize and analyze data using statistical methods; predict results; and interpret uncertainty using concepts of probability.

C. Determine, describe and apply the probabilities of events. (*Probability, including counting techniques*)

10.C.3b Analyze problem situations (e.g., board games, grading scales) and make predictions about results.

Descriptor – Stage G

2. Make and test conjectures about the results of experiments and simulations using proportionality and basic understanding of probability.

***LineUp With Math™* Activities**

--Use an interactive simulator plus calculation worksheets to apply proportional reasoning to identify and resolve distance, rate, time conflicts in air traffic control.

Descriptor – Stage H

2. Design and conduct experiments or simulations for probability, including the possible use of technology to simulate events.

***LineUp With Math™* Activities**

--Use an interactive simulator plus calculation worksheets to model and resolve air traffic control conflicts.